Shifting attention from objective risk factors to patients' self-assessed health resources: a clinical model for general practice

Hanne Hollnagel and Kirsti Malterud*


The study was designed to present and apply theoretical and empirical knowledge for the construction of a clinical model intended to shift the attention of the general practitioner from objective risk factors to self-assessed health resources in male and female patients. Review, discussion and analysis of selected theoretical models about personal health resources involving assessing existing theories according to their emphasis concerning self-assessed vs. doctor-assessed health resources, specific health resources vs. life and coping in general, abstract vs. clinically applicable theory, gender perspective explicitly included or not. Relevant theoretical models on health and coping (salutogenesis, coping and social support, control/demand, locus of control, health belief model, quality of life), and the perspective of the underprivileged Other (critical theory, feminist standpoint theory, the patient-centred clinical method) were presented and assessed. Components from Antonovsky's salutogenetic perspective and McWhinney's patient-centred clinical method, supported by gender perspectives, were integrated to a clinical model which is presented. General practitioners are recommended to shift their attention from objective risk factors to self-assessed health resources by means of the clinical model. The relevance and feasibility of the model should be explored in empirical research.

Introduction

"As family physicians, interested in health as well as disease, we should also think in terms of factors that increase host resistance and strengthen resistance against noxious stimuli."

Experienced general practitioners are in the privileged position to observe the power of the human body's capacity for repair and restoration. Behavioural and psychoimmunoneurological medical research substantiates the prominence of human self-healing potentials and their relationship to the internal and external context of the individual. Physical exercise seems to reduce symptoms of depression and anxiety, probably through the endorphin and the monoamine systems, and relaxation training improves blood glucose control in diabetes mellitus. Psychological stress disturbs the systems which normally defend people against acute infectious respiratory illness, and psychosocial treatment may influence survival rate in patients with metastatic breast cancer. Although much is still unknown about interfaces and mechanisms responsible for mediation of these matters, experimental observations indicate that the existence of comprehensive interactions between the nervous and the immune system mediated through various endocrinological gateways.

Risk epidemic

In spite of the advancing empirical research which supports ideas about personal health resources, risk factors still seem to dominate the attention of contemporary medicine. Questions about patients' potentials are largely missing in mainstream research and theory from general practice, even within the area of preventive medicine. Primary health care classification systems do not include resource issues. The increasing number of articles in which the term 'risk' are used has even led to the statement that we are confronted with a risk epidemic in medical journals. However, the general advantages of risk finding approaches to
disease outcome as compared to resource approaches have not been convincingly demonstrated. Several significant questions regarding methods, outcome and ethical issues related to preventive health care have not been satisfactorily answered either.\textsuperscript{14}

**Health resources**

This is why we suggest that there might be more adequate theoretical approaches for clinical practice. Hjort represents this line of thought when he describes the two aims of preventive medicine: 1) to reduce stress and risk (decrease the negative influence), and 2) to facilitate mastering and resources (increase the positive influence) (Figure 1).\textsuperscript{15} According to a resource approach, the major task of the doctor is to promote the ability of the patient to restore the balance between stresses and resources. Accomplishing this task demands of the doctor knowledge about resources in people in general, as well as the skills needed to identify the actual potential of the individual man or woman.\textsuperscript{16} From our own research we have experienced that patients frequently hold valuable medical knowledge about themselves which may be useful to the doctor.\textsuperscript{17,18} Our hypothesis is that this is true even when it comes to the assessment of personal health resources. This point of view is supported by empirical studies which demonstrate that self-assessed illness correlates with observer-assessed disease,\textsuperscript{19} and self-assessed health is an important predictor for future health and mortality.\textsuperscript{20–23} Innovative research on subjective health assessment has been called for.\textsuperscript{24}

![Stress Risks](image1)

**Figure 1** The aims of preventive medicine (to decrease negative influence and increase the positive influence) (Hjort 1993)

As general practitioners we have observed that male and female patients hold different strategies for management of their personal health resources. This is supported by Carmel,\textsuperscript{25} who observes notable gender differences in the use and effects of psychosocial coping resources. Carmel presents gender differences in appraisals of life events as well as their emotional impact. Eisler and Blalock discuss how commitment to masculine schemata can lead to gender role stress and dysfunctional coping behaviours in men.\textsuperscript{26} We therefore consider a gender perspective as required in order to understand interactions between health and personal resources.

**Problem approach**

Our experiential, theoretical and empirical preconceptions have motivated us to explore people's self-assessed positive health resources from the general practitioner's perspective. In this article, we shall present a theoretical frame of reference regarding patients' self-assessed health resources and a model for clinical application which indicates why and how the general practitioner should contribute to assemble such knowledge. The model is intended to shift the attention of the general practitioner from objective risk factors to self-assessed health resources in male and female patients.

This article is part of a research project including theoretical elaboration, development and application of a clinical communicative method based on key questions, longitudinal epidemiological research, and the progress of a taxonomy for classification of patient's self-assessed resources in general practice.

**Method**

The foundations of the model are derived from review, discussion and analysis of selected theoretical models dealing with the significance of personal resources for prevention and cure of disease in women and men. The elements from which the theoretical frame of reference is composed will be presented and discussed according to the following questions:

1) Does the theory deal with self-assessed or doctor-assessed health resources?

2) Does the theory deal specifically with health resources and disease, or does it include coping with life in general as well?

3) Is the theory purely abstract, or can it be applied in the everyday general practice context?

4) Has the gender perspective been accounted for within the theory?

The outcomes of these analytical questions constitute the basis for construction of the clinical model which we intend to present as our conclusion.

**Theoretical models about personal health resources**

The following theoretical models were selected after an extensive literature search. Our starting point was to look for articles referring to health resources, in the personal and not the economic connotation. Although
the literature attained by these means was not very abundant, it gave us access to supplementary key words pointing towards theory from psychology and social science (including for example beliefs, coping, empowerment, growth, hardiness, humour, locus of control, mastery, optimism, personal strength, potency, quality of life, resources, resilience, self esteem, social support, strength). From this literature we have selected several potentially relevant theoretical models concerning first coping, and second, the perspective of the underprivileged Other. These will be presented and discussed below. Among the coping theories, Antonovsky’s salutogenic concept represents a leading point of view for our purpose, and will therefore be given priority.

**Salutogenesis**

In 1979 Antonovsky posed the question of the origins of health (*salutogenesis*), in comparison to the question of the origins of disease (*pathogenesis*). He started by wondering how some concentration camp survivors managed to be well adapted and seemed reasonably healthy and happy, in spite of their stressful background. Where did they find their strength and ability to cope? Antonovsky asked: “How do any of us manage to stay healthy?” He argues that stressors are omnipresent in human existence because of its very nature. Throughout our lives, psychosocial, physical and biochemical stressors continuously put us into a state of tension. Antonovsky calls attention to the larger social system in which the mind–body relationship operates.

Antonovsky’s point is a shift from the study of relationships between stress and disease to the study of successful tension management. He asks: “What determines such successes?” From these questions emerges his salutogenic model of health (Figure 2). Antonovsky does not dichotomize health/disease, but has a dynamic view of a continuum between these concepts. From the literature on psychosocial stress and epidemiology Antonovsky derives the concept of general resistance resources (GRRs) (Table 1), assumed to facilitate tension management and coping in

![Figure 2](image-url)

**Figure 2** The salutogenic model of health (simplified after Antonovsky 1979)

GRRs (general resistance resources): By definition a GRR provides one with sets of meaningful, coherent life experience (see also Table 1);

- stressors place a load on people;
- tension is the response of the organism to stressors;
- tension management is the process of dealing with the tension;
- successful tension management can be achieved by avoidance of the stressor, defining stressor as non stressor, overcoming the stressor, effective tension management, resolving the tension;
- stress is the state of the organism in response to the failure to manage tension well and overcome stressors;

SOC (sense of coherence): By definition SOC is a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected;
most people. Theoretical analysis of the nature of GRRs (why do such resources counteract stress, what did they have in common?) led to the formulation of a theoretical construct, the Sense of Coherence (SOC), intended to explain the relationship between health and personal resources. This construct has later been elaborated into the SOC Scale,\(^{27, 29, 30}\) a questionnaire for measurement of people's sense of coherence. Empirical research gives strong evidence for bivariate correlations between the SOC-scale and measures of health and well-being.\(^{31}\)

For our purpose, we intend to concentrate on Antonovsky's salutogenic perspective and his concept General Resistance Resources (GRRs) as more immediately applicable for clinical purposes than the SOC concept and theory.

### Additional relevant theoretical concepts of coping

Lazarus and Folkman define 'coping' as constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person.\(^{32, 33}\) They consider coping as a process, where the focus is put on what the person actually thinks or does, as related to a specific context, which implies that there may be a change in coping thoughts and acts as a stressful encounter unfolds. According to Lazarus and Folkman, coping can be emotion-focused, with strategies to influence emotional distress, or problem-focused, with strategies used for problem-solving. The two forms of coping may be mutually facilitative. Within this theoretical framework, health is mainly mentioned as a potential coping resource, while the consequences of coping for health are not comprehensively discussed.

Social support seems to modify the harmful events of stressful life events.\(^{34}\) From a review of empirical studies within this field, House \textit{et al.} conclude that variously termed social relationships, social network and social support have important causal effects on health, exposure to stress, and the relationship between stress and health.\(^{35}\)

Within the literature there seems to be no conceptual consensus on a theoretical or empirical definition of 'social support'. It is not clear how social relationships influence health. Although the individual's patterns of coping and her social support are strongly interrelated matters, we find the theoretical foundations within this field to be unspecific and therefore inadequate as conceptual elements for our model on health resources.

Karasek postulates that psychological strain results not from a single aspect of the work environment, but from the joint effects of the demands of a work situation and the amount of decision-making freedom available for facing those demands.\(^{36}\) According to the control--demand model, job strain occurs when job demands are high and job decision latitude is low. Scales have been constructed to measure psychological stressors related to work, but according to Karasek, knowledge about the congruence of self-rated and objective ratings for job demands is still lacking. The model has been tested with longitudinal data, which confirm the importance of the balance between control and demands in a person's life. These matters probably represent important presumptions for the fulfillment of personal health resources as well.

Locus of control (LOC) refers to the perceived source of control over one's behaviour.\(^{37}\) The LOC ranges from highly 'internal' to highly 'external'. An internal person is one who tends to take responsibility for his own actions, who views himself as having control over his destiny. An external person is one who tends to see control as residing elsewhere and to attribute success or failure to outside forces.

LOC measurement scales have been constructed to predict health behaviour, or to measure treatment outcome (diabetes, myocardial infarction, smoking cessation, epilepsy, childbirth, cancer). We assume that an internal locus of control may represent a positive health resource because the individual needs to believe that she herself has the power to influence her own health.

The Health Belief Model\(^{38}\) deals with explanations of health behaviour in individuals who believe themselves to be free of symptoms or illness. It includes two classes of variables: 1) the psychological state of readiness to take specific action, and 2) the extent to which a particular course of action is believed to reduce the threat. Inspired from social learning theory, self-efficacy has been included in later versions.\(^{39}\) Still, the Health Belief Model seems to be of greater relevance to explain the effect of actions taken by the health care system than to understand how people can utilize their own health resources for prevention of disease.

### Table 1

<table>
<thead>
<tr>
<th>General Resistance Resources (GRRs)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
</tr>
<tr>
<td>Knowledge, intelligence</td>
</tr>
<tr>
<td>Ego identity</td>
</tr>
<tr>
<td>Coping strategies (rational, flexible, farsighted)</td>
</tr>
<tr>
<td>Social supports, ties</td>
</tr>
<tr>
<td>Commitment—continuance—cohesion—control</td>
</tr>
<tr>
<td>Cultural stability</td>
</tr>
<tr>
<td>Magic</td>
</tr>
<tr>
<td>Religion, philosophy, art (a stable set of answers)</td>
</tr>
<tr>
<td>Preventive health orientation</td>
</tr>
<tr>
<td>Positive, self-assessed health status</td>
</tr>
<tr>
<td>Time available for action</td>
</tr>
<tr>
<td>The general practitioner</td>
</tr>
<tr>
<td>Genetic and constitutional GRRs</td>
</tr>
</tbody>
</table>

*General Resistance Resources (GRRs) are defined as any characteristic of the person, the group, or the environment that can overcome the stressor or facilitate effective tension management, and thus preventing tension from being transformed into stress (Antonovsky 1989)
The concept ‘quality of life’ has gained increasing importance in clinical research and patient care within the last decades. Measurements of quality of life have been used to distinguish different patients or groups of patients, to predict patient outcomes, and to evaluate therapeutic intervention. Although quality of life has been extensively measured, it still appears to be an equivocal notion, largely lacking a unique meaning. The term does not differentiate between qualities related to disease, functional status, health status, or conditions of life. ‘Overall’ quality of life is not systematically distinguished from health-related quality of life, and the individual’s perception is seldom asked for. Gill and Feinstein conclude that there is no theoretical consensus behind the questionnaires and rating scales applied within this field. Although the measurements might be cross-culturally reliable, their face validity is low, and thus unsuitable as basic concepts for our purpose.

Theories about the perspective of the underprivileged Other

Critical theory was originally developed by the Frankfurter School, represented by the philosophers Horkheimer, Marcuse, Adorno and especially Habermas. The goal of critical theory was not only increase in knowledge, although it aimed at critique and formulation of epistemology and methodology. Its main purpose was to contribute to emancipation and empowerment of people. Habermas concentrates on three categories of knowledge which shape social reality: technical, practical and emancipatory interests. Critical theory is supposed to promote empowerment by means of communicative action, which ideally can uncover the pathology of a situation and identify its future emancipatory potential. Critical theory assigns strategies for employing communicative action and analysis in order to strengthen the resources in individuals and groups of people for the purpose of personal and political liberation.

Feminist theories are closely connected to critical theory, although the latter lacks a gender perspective regarding social repression and liberation. According to feminist standpoint theory, people’s interpretations and explanations of nature and social life are derived from the social identity and gender of the observer. The theory argues that men’s dominating position in social life results in partial and insufficient understanding, while women’s subjugated position provides the possibility of more complete understanding, due to different socialization, life experiences and positions of influence of men and women.

Feminist standpoint theory acknowledges the resources which paradoxically are developed in women in a society where the male gender is dominant. The perspectives and language of science reflect the world of men. According to feminist standpoint theory, women learn to apply knowledge derived from male perspectives in addition to their experiences derived from female perspectives. Women may thus be considered as ‘bilingual’, representing a double source of knowledge. This frame of reference includes explicitly the matters of gender and power in its conceptual image of personal and social resources.

The patient-centred clinical method originates from the problem that the traditional clinical method diagnoses only disease, but does not aim to understand the meaning of the illness for the patient. McWhinney notes that the traditional perspective entails a seriously defective diagnostic perspective, where information essential for proper understanding of clinical problems is omitted. The alternative is a transformation, requiring a radical change in the definition of the medical task, in the basic epistemology of medicine, as well as in the physician herself.

According to the patient-centred clinical method, the voice of the patient is regarded to be of equal importance as the traditional medical findings in order to obtain a diagnostic conclusion. The tasks of the doctor are to identify and pursue the medical agenda as well as the patient’s agenda (expectations, feelings and fears). By understanding illness experience, the doctor can integrate information from both agendas and obtain a more complete medical and diagnostic understanding by employing the resources of the patients. The patient-centred clinical method represents an adequate framework for clinical exploration of the patient’s self-assessed health resources.

The health resource/risk balance model

Only two of the presented models fulfill most of our requirements as potential theoretical raw material for our clinical model, due to their answers regarding our analytical questions. Although Antonovsky’s salutogenetic perspective and McWhinney’s patient-centred clinical method apparently represent very different approaches, they both comprise important components for our purpose. They allow for analysis of the patient’s self-assessed health resources, they acknowledge a limitation between happiness and life in general versus specific medical matters, and they are both conceptually well defined and relevant for clinical use.

These theoretical models are therefore given priority as the cornerstones of our model. We underline the necessity of including parallel agendas, where neither the perspectives of disease, risk factors nor objective assessment are omitted. However, we shall not conceal the intention of the model as a tool for shifting the focus of the general practitioner from risk factors to individual, self-assessed health resources. Both illness and disease should be recognized as adequate targets
for personal health resources. Antonovsky’s health continuum makes it possible not to dichotomize health and disease and thereby the model can be applied without regard to the patient’s reason for contact (preventive health care as well as the diagnosis and treatment of disease).

Elements from some of the remaining theories should also be mentioned, although they are not formally included in the model. Neither Antonovsky nor McWhinney address the matter of gender, which is of major influence when strategies about empowerment through identification and encouragement of individual health resources are considered. We therefore recommend adding a gender perspective, preferably a feminist one, which will account for important differences between men and women relating to social oppression and power, and consequently health. Karasek’s control–demand model and Lefcourt’s locus of control represent opportunities on different conceptual levels for analysis of contextual matters which may influence a person’s self-assessed health resources. These concepts may deliver specific frames of reference for analysis and explanation. Figure 3 represents the clinical model which emerges as the summarized result of this theoretical elaboration.

Because the model rests on existing theories, we frankly admit that objections regarding its originality may be raised. However, our intention has been to call attention to certain issues which we consider to be underestimated by clinicians, rather than to invent something completely new. The major elements of the patient-centred clinical method have previously been modified for similar purposes—by Fehrsen and Henbest regarding a three-stage assessment (clinical, individual and contextual), by Freeman on case presentation, and by Stewart and coworkers on a primary health care approach. This is the perspective in which the model should be judged—can it be employed in the general practice context, and will it contribute to resource-oriented consultations?

Although we believe in the power of individual self-assessed health resources, we do not regard disease as a consequence of weak willpower in the patient. We want to warn against an interpretation of the model in which bad health is blamed upon the victim. We will also warn against attitudes which imply that medicine and health care are the major components of health and happiness. However, our recommendation is that the general practitioner needs to concentrate especially on the element of individual self-assessed resources, because this is a matter which so far has been largely neglected.

We do not intend to prescribe procedures for application beyond the principles presented here. However, the relevance and feasibility of the model—its pragmatic validity—needs to be explored in clinical practice. This is the objective of our next, ongoing study.

**Acknowledgements**

Professors Peter F. Hjort (Norway), Professor Joseph H. Levenstein (USA) and Ian R McWhinney (Canada) have contributed substantially to development of the model by allowing us to modify their previously developed models. The latter has also given most helpful and relevant comments to this article. We are greatly indebted to them.

**References**
